# **Newborn Screening Quality Assurance Program**

Quality Control Specimen Certification Lot 1401-1403 T4; Lot 1411-1413 TSH; Lot 1351-1353 17-OHP Set 1- January 12, 2015

#### T4, TSH and 17-OHP METHOD: FIA

ENRICHMENT LEVELS (endogenous levels not included)

Analyte	Lot	Low	Lot	Intermediate	Lot	High
Thyroxine (T <sub>4</sub> μg/dL serum)	1401	2	1402	7	1403	11
Thyroid-Stimulating Hormone (TSH μIU/mL serum)	1411	25	1412	40	1413	80
17 α-Hydroxyprogesterone (17-OHP ng/mL serum)	1351	25	1352	50	1353	100

#### ANALYTICAL INFORMATION

Analyte	Lot	Mean/ 95% CL	Lot	Mean/ 95% CL	Lot	Mean/ 95% CL
T <sub>4</sub>	1401	$\bar{x} = 1.8$ CL = 1.4-2.2	1402	$\bar{x} = 6.4$ CL = 5.5-7.2	1403	$\bar{x} = 11.0$ CL = 9.3-12.7
TSH	1411	$\bar{x} = 25.3$ CL = 21.7 – 29.0	1412	$\bar{x} = 42.4$ CL = 36.1 – 48.7	1413	$\bar{x} = 86.3$ CL = 74.6 - 97.9
17-OHP	1351	$\overline{x} = 21.0$ CL = 16.4 - 25.8	1352	$\overline{x} = 44.6$ CL = 36.3 - 53.0	1353	$\bar{x} = 87.9$ CL = 69.4 – 106.4

**Note:** The values provided in the above tables are for reference use only. The mean value and confidence limits (CL) are determined by CDC for each Quality Control (QC) lot. Each participating laboratory must establish its own mean values and CL for its test method with these QC materials. Temporary estimates of mean values and CL can be determined after 20 successive, independent measurements.

**Reference:** Slazyk WE, Hannon WH. Quality Assurance in the newborn screening laboratory. In:Therrell BL Jr, editor. Laboratory methods for neonatal screening. Washington (DC): American Public Health Association, 1993:23-46.

### **Newborn Screening Quality Assurance Program**

Hormones Quality Control Specimen Certification
Lot 1301-1303 T4 – January 12, 2015

### **Previous Lot Transition Materials (parallel testing)**

## T4, TSH and 17-OHP METHOD: FIA

ENRICHMENT LEVELS (endogenous levels not included)

Analyte	Lot	Low	Lot	Intermediate	Lot	High
Thyroxine (T <sub>4</sub> μg/dL serum)	1301	2	1302	7	1303	11
Thyroid-Stimulating Hormone (TSH μIU/mL serum)						
17 α-Hydroxyprogesterone (17-OHP ng/mL serum)						

#### ANALYTICAL INFORMATION

Analyte	Lot	Mean/ 95% CL	Lot	Mean/ 95% CL	Lot	Mean/ 95% CL
T <sub>4</sub>	1301	$\bar{x} = 1.6$ CL = 0.9-2.2	1302	$\bar{x} = 6.1$ CL = 5.1-7.1	1303	$\bar{x} = 9.5$ CL = 7.2-11.8
TSH						
17-OHP						

**Note:** The values provided in the above tables are for reference use only. The mean value and confidence limits (CL) are determined by CDC for each Quality Control (QC) lot. Each participating laboratory must establish its own mean values and CL for its test method with these QC materials. Temporary estimates of mean values and CL can be determined after 20 successive, independent measurements.

**Reference:** Slazyk WE, Hannon WH. Quality Assurance in the newborn screening laboratory. In: Therrell BL Jr, editor. Laboratory methods for neonatal screening. Washington (DC): American Public Health Association, 1993:23-46.